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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ZEWDU, MELESS NMN

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/806,490	Applicant(s) HOFFMAN, LAWRENCE ANDREW	
	Examiner Meless N. Zewdu	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
 4a) Of the above claim(s) 36-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-35 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☒ Claim(s) 36-40 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>5/18/06</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/26/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This action is the first on the merit of the instant application.
2. Claims 1-40 are pending in this action.

Claim Objections

Claim 31 is objected to because of the following informalities: the claim lacks a period at the end of the text. Appropriate correction is required.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-35, drawn to call diversion, classified in class 455, subclass 417.
- II. Claims 36-40, drawn to call diversion, classified in class 455, subclass 575.5.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the

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particulars of the subcombination as claimed because the search for one group does not include the search for the other. The subcombination has separate utility such as antenna shielding for protecting users from radiation.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Paul J. Fordenbacher (Reg. No. 42,546) on 5/18/06 a provisional election was made without traverse to prosecute the invention of group I, claims 1-35. Affirmation of this election must be made by applicant in replying to this Office action. Claims 36-40 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 10, 15-22, 24 and 28-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Patton (US 2005/0037742 A1).

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As per claim 1: Patton discloses an interruption-sound device for producing an interruption-sound signal in a telecommunications transmission signal, the apparatus comprising:

a signal generator circuit for producing an interruption-sound signal (see paragraph 0012); and

a processor circuit for processing the interruption-sound signal in combination with a voice signal generated by a microphone to produce a transmission signal including the interruption-sound signal (see fig. 3, element 56; paragraphs 0019-0020; 0025).

As per claim 2: Patton discloses a device, wherein the interruption-sound signal comprises characteristic sounds associated with a mobile phone in the process of dropping a call (see paragraphs 0012; 0025).

As per claim 3: Patton discloses a device, wherein the processor circuit comprises a mixer circuit adapted to combine the interruption-sound signal with the voice signal (see paragraph 0012). Since the interruption sound signal is added/combined, a mixer must be inherent to the prior art of reference.

As per claim 4: Patton discloses a device, further comprising a trigger circuit adapted to activate or activate and deactivate the signal generator circuit (see paragraphs 0018; 0024).

As per claim 5: Patton discloses a device, wherein the signal generator circuit further comprises: a timer circuit adapted to disconnect the call a predetermined length of time

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after activation of the signal generator circuit (see paragraph 0024). Length to time indicates the presence of a timer.

As per claim 10: Patton discloses a device, wherein the signal generator circuit further comprises:

a sound storage circuit adapted to store one or more interruption-sound signals and a playback circuit adapted to control the sound storage circuit to produce one or more of 10 the interruption-sound signals (see paragraph 0036).

As per claim 15: Patton discloses a device, further comprising switch a circuit comprising:

a switch (see fig. 2, element 20; paragraph 0013); and

a signal processor adapted to control the switch, the switch adapted to control the transmission of either the voice signal or the interruption-sound signal (see fig. 3, element 56; paragraphs 0018 and 0024). The activating key/s of the prior art can be considered as a switch.

As per claim 16: Patton discloses a device, further comprising a housing adapted to contain the signal generator circuit and processor circuit, adapted for electrically coupling between a telephone and a landline network (see paragraphs 0013-0015).

As per claim 17: Patton discloses a device, further comprising an activation switch external to the housing and adapted to active and/or deactivate the signal generator circuit (see fig. 1, element 20). Element 20 of fig. 1 is an activating/deactivating button/switch external to the housing of the telephone to which it is coupled.

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As per claim 18: the features of claim 18 are similar to the features of claim 1. Hence, claim 18 is rejected on the same ground as claim 1.

As per claim 19: the feature of claim 19 is similar to the feature of claim 2. Hence, claim 19 is rejected on the same ground as claim 2.

As per claim 20: the feature of claim 20 is similar to the feature of claim 3. hence, claim 20 is rejected on the same ground as claim 3.

As per claim 21: the feature of claim 21 is similar to the feature of claim 4. Hence, claim 21 is rejected on the same ground as claim 21.

As per claim 22: the feature of claim 22 is similar to the feature of claim 5. Hence, claim 22 is rejected on the same ground as claim 5.

As per claim 24: the feature of claim 24 is similar to the feature of claim 10. Hence, claim 24 is rejected on the same ground as claim 10.

As per claim 28: the feature of claim 28 is similar to the feature of claim 15. Hence, claim 15 is rejected on the same ground as claim 15.

As per claim 29: Patton discloses a device, wherein the telecommunications device is a landline phone, the interruption-sound device located within and coupled with internal circuitry of the landline phone (see paragraph 0014). Placing the interruption-sound device within or out side of the body of a landline phone would have been a choice of design.

As per claim 30: Patton discloses a device, wherein the telecommunications device is a wireless phone, the interruption-sound device located within and coupled with internal circuitry of the wireless phone (see figs. 1 and 2, element 20; paragraph 0014). Placing

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the interruption-sound device within or out side of the body of a wireless phone would have been a choice of design.

As per claim 31: the feature of claim 31 is similar to the feature of claim 30. Hence, claim 31 is rejected on the same ground as claim 30.

As per claim 32: the feature of claim 32 is similar to the feature of claim 1, except the feature directed to -- activating an interruption-sound device for producing an interruption-sound signal in a transmission signal that is perceived by the interruptee during a call as the characteristic sounds associated with a mobile phone in the process of dropping a call, which is disclosed by Patton (see paragraphs 0012; 0025). Hence, claim 32 is rejected on the same ground as claim 1.

As per claim 33: Patton discloses a method, further comprising deactivating the interruption-sound device so as to continue the call (see paragraphs 0018 and 0035).

As per claim 34: Patton discloses a method, wherein activating an interruption-sound device comprises activating one or more buttons so as to activate the interruption-sound device for a predetermined amount of time after which the call is disconnected (see paragraphs 0018; 0024; 0028).

As per claim 35: Patton discloses a method, wherein the predetermined amount of time is determined by the selection of particular one or more buttons (see paragraph 0024).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 11-13, 23 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patton as applied to claims 1 and 18 above, and further in view of Shunichi (JP 2001257745 A).

As per claim 6: the above references do not teach about a synthesizer circuit for producing a sound signal, as claimed by applicant. However, in a related field of endeavor, Shunichi teaches about a synthesizer that reproduces a background sound recorded by a mobile telephone for transmitting to a destination/receiver (see entire document, particularly abstract; paragraphs 0006-0008). When the references are combined, Patton's reference, not only use the sound produced by Shunichi's teaching, would have included the transmission of background sounds. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the above reference with the teaching of Shunichi for the advantage of transmitting background sound along with audio signal when using mobile telephone (see abstract, particularly 'use').

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As per claim 11: Shunichi teaches a device, wherein the sound storage circuit is adapted to store the one or more interruption-sound signals in pulse-code-modulated (PCM) format (see paragraphs 0006-0009).

As per claim 12: Shunichi teaches a device, wherein the processor circuit comprises:

a modulator and mixer circuit for frequency translation, frequency changing, and/or heterodyning, which acts upon the voice signal (see entire document, particularly paragraphs 0006-0009).

As per claim 13: Shunichi teaches about a device, wherein the processor circuit comprises:

a modulator and mixer circuit for frequency translation, frequency changing, and/or heterodyning (see entire document, particularly paragraphs 0006-0009). When the references are combined, the background sound will act upon the transmission signal so as to cause loss of channel locking.

As per claim 23: the feature of claim 23 is similar to the feature of claim 6. Hence, claim 23 is rejected on the same ground and motivation as claim 6.

As per claim 25: the feature of claim 25 is similar to the feature of claim 11. Hence, claim 25 is rejected on the same ground and motivation as claim 11.

As per claim 26: the feature of claim 26 is similar to the feature of claim 12. Hence, claim 26 is rejected on the same ground and motivation as claim 12.

As per claim 27: the feature of claim 27 is similar to the feature of claim 13. Hence, claim 27 is rejected on the same ground and motivation as claim 13.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patton in view of Shunichi as applied to claims 1 and 6 above, and further in view of Rose et al (Rose) (US 5,297,203).

As per claim 7: but, the references applied to claims 1 and 6 do not explicitly teach about a synthesizer circuit that comprises a voltage-controlled oscillator circuit, as claimed by applicant. However, in a related field of endeavor, Rose teaches about a digital cordless telephone apparatus that includes a synthesizer circuit coupled with a VCO for producing voice and command data channels (see fig. 8, elements 145, 147, 163 and 165; col. 22, line 65-col. 23, line 67). When the references are combined, the command data could be replaced by a voice call interruption data and the call, instead of terminating to a base unit could have extended to a called party. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify the above references with the teaching of Rose for the advantage of transmitting both digitized voice data digitized command data between a hand unit and a base unit (see col. 1, lines 8-18). When the references are combined, the command data could be replaced by a voice call interruption data and the call, instead of terminating to a base unit could have extended to a called party.

As per claim 8: Rose teaches a device, wherein the synthesizer circuit comprises a frequency-filtering circuit (see fig. 8, elements 166 and 148; col. 22, line 65-col. 23, line 67).

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As per claim 9: Rose teaches a device, wherein the synthesizer circuit further comprises a voltage-controlled oscillator circuit (see fig. 8, element 145 and 163; col. 22, line 65-col. 23, line 67).

Allowable Subject Matter

Claim 14 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Banks-Harold, Marsha can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Meless Zewdu

Examiner

19 May 2006.

Zewdu Debes 5-19-06